

This listing of claims will replace all prior versions, and listings, of claims in the application.

In the Claims:

1-18. Canceled.

19. (CURRENTLY AMENDED) A laser machining apparatus comprising:

a workpiece fixture for fastening a workpiece,

a first laser removing device for laser drilling a workpiece using first operating parameters, and

a second laser removing device which can machine a workpiece using second operating parameters that are different from said first operating parameters[, especially regarding the quality and/or quantity]],

characterized in that

the second laser machining apparatus is a laser removing device for a material removal in layers for the production of a die by material removal in layers,

the laser beam outlets of the two laser removing devices are fixedly mounted in a manner offset against each other with respect to at least one[, preferably two, axes, more preferably with respect to the two horizontal axes (x, y)]] axis, and

mechanical adjustment axes are provided by means of which the workpiece may be adjusted translatorily with respect to a machine frame such that it

may slide between [[the]] operating windows of the first and the second laser removal devices.

20. (PREVIOUSLY PRESENTED) The laser machining apparatus according to claim 19,

characterized in that said first laser removing device comprises a first laser source and said second laser removing device comprises a second laser source.

21. (CURRENTLY AMENDED) The laser machining apparatus according to claims 19 or 20,

characterized in that at least one of said laser removing devices comprises a beam guide[[, preferably through one or more deflection mirrors]].

22. (CURRENTLY AMENDED) The laser machining apparatus according to claim 19, characterized in that the laser beam outlet of one or both laser removing devices is slidable with respect to at least one axis[[, preferably the vertical axis (z)]].

23. (PREVIOUSLY PRESENTED) The laser machining apparatus according to claim 22, characterized in that the laser source is slidable in parallel and in sync to the laser beam outlet.

24. (PREVIOUSLY PRESENTED) The laser machining apparatus according to claim 19, characterized by a first control for controlling the first laser removing device and a second control for controlling the second laser removing device.

25. (PREVIOUSLY PRESENTED) The laser machining apparatus according to claim 24, characterized in that the second control operates at a higher clock frequency than the first control.

26. (PREVIOUSLY PRESENTED) The laser machining apparatus according to claims 24 or 25, characterized by an interface between the first and second controls.

27. (PREVIOUSLY PRESENTED) The laser machining apparatus according to claim 19, characterized in that the first laser removing device comprises a first optical system and the second laser removing device comprises a second optical system.

28. (PREVIOUSLY PRESENTED) The laser machining apparatus according to claim 19, characterized in that the first laser removing device comprises a first sensor system and the second laser removing device comprises a second sensor system.

29. (CURRENTLY AMENDED) The laser machining apparatus according to claim 19, characterized in that the first laser removing device ~~may comprise~~ comprises one or more of the following operating parameters:

- [[•]] ~~a pulsed laser light, in particular~~ having a laser pulse frequency of
[[0. 1]] 0.1 to 100 Hz, ~~preferably 1 - 30 Hz;~~
- [[•]] a laser pulse duration of 0.1 to 20 ms, ~~preferably 0.3 to 2 ms;~~
- [[•]] ~~a pulse peak performance > 1 kW,~~ preferably > 20 kW;
- [[•]] ~~a laser performance of~~ 300 W ~~[-] to~~ 3 kW;
- [[•]] an energy per pulse of 1 - 100 J~~[[, preferably 10 - 50 J,]]~~; and
- [[•]] a laser type~~[[:]]~~ comprising one of solid-state laser, in particular a diode-pumped solid-state laser or a lamp-pumped solid-state laser~~[[,]]~~;

and that the second laser removing device ~~may comprise~~ comprises one or more of the following operating parameters:

- [[•]] ~~a pulsed laser light, in particular~~ having a laser pulse frequency of
1 to 100 kHz, ~~preferably 10 - 50 kHz;~~
- [[•]] a laser pulse duration of 10 to 1500 ns, ~~preferably 100 to 500 ns;~~
- [[•]] ~~a laser performance of~~ 10 ~~[-] to~~ 200 W, ~~preferably 20 [-] to~~ 50 W;
- [[•]] an energy per pulse of 1 - 50 mJ~~[[,]]~~; and
- [[•]] a laser type~~[[:]]~~ comprising a quality-switched solid-state laser.

30. (CURRENTLY AMENDED) A laser machining method wherein a workpiece is clamped and then machined using laser light, wherein a first operating step of laser drilling is performed through a first laser removing device using first operating parameters and a second machining step is performed through a second laser removing device to machine the workpiece using second operating parameters different from the first operating parameters, ~~especially regarding the quality and/or quantity,~~

characterized in that

the second machining step is the production of a die by material removal in layers using a laser,

the lasers of both laser removal devices are radiated at laser beam outlets which are fixedly mounted in a manner offset against each other with respect to at least one, ~~preferably two, axes, more preferably with respect to the two horizontal axes (x, y) axis,~~ and

the workpiece may be adjusted translatorily without changing the clamping with respect to a machine frame using mechanical adjustment axes such that it may be moved between ~~[[the]]~~ operating windows of the first and the second laser removal devices.

31. (PREVIOUSLY PRESENTED) The method according to claim 30, characterized in that a measurement of the distance necessary for the second machining step is performed before the first machining step is taken.

32. (PREVIOUSLY PRESENTED) The method according to claims 30 or 31, characterized in that during the first machining step using the first laser removing device the focusing of the laser beam is fixed whereas during the second machining step using the second laser removing device the focusing of the laser beam is tracked.

33. (PREVIOUSLY PRESENTED) The method according to claims 30 or 31, characterized in that during the first machining step using the first laser removing device process gas is supplied.

34. (PREVIOUSLY PRESENTED) The method according to claim 32, characterized in that during the first machining step using the first laser removing device process gas is supplied.

35. (PREVIOUSLY PRESENTED) The method according to claim 30, characterized in that during the second machining step using the second laser removing device the location of the laser beam is guided by a variable beam guide.

36. (PREVIOUSLY PRESENTED) The method according to claim 30, characterized in that during the first machining step using the first laser removing device the relative position of the location of the first laser removing device to the workpiece is changed.

37. (PREVIOUSLY PRESENTED) The method according to claim 30, characterized in that first the machining step having a higher laser performance is taken and then the machining step having a lower laser performance is taken.

38. (NEW) The laser machining apparatus according to claim 19, characterized in that the laser beam outlets of the two laser removing devices are fixedly mounted in a manner offset from each other with respect to two axes.

39. (NEW) The laser machining apparatus according to claim 29, characterized in that the first laser moving device comprises a pulsed laser light having a laser pulse frequency of 1 to 30 Hz.

40. (NEW) The laser machining apparatus according to claim 29, characterized in that the first laser moving device has a laser pulse duration of 0.3 to 2 ms.

41. (NEW) The laser machining apparatus according to claim 29, characterized in that the first laser moving device has a pulse peak performance greater than 20 kW.

42. (NEW) The laser machining apparatus according to claim 29, characterized in that the first laser moving device has an energy per pulse of 10 to 50 J.

43. (NEW) The laser machining apparatus according to claim 29, characterized in that the second laser moving device comprises a pulsed laser light having a laser pulse frequency of 10 to 50 kHz.

44. (NEW) The laser machining apparatus according to claim 29, characterized in that the second laser moving device has a laser pulse duration of 100 to 500 ns.

45. (NEW) The laser machining apparatus according to claim 29, characterized in that the second laser moving device has a laser performance of 20 to 50 W.

46. (NEW) A method according to claim 30, characterized in that the lasers of both laser removal devices are radiated at laser beam outlets which are fixedly mounted in a manner offset against each other with respect to two axes.